

Work Order ID 149016

July 15, 2016 3:27:11 PM

Airbus
149016

Page 1

Item ID: D350-591-311

Revision ID:

Item Name: Heli-Access-Step™ LH - High Gear, Long Step, Aerazur Float Compatible

Start Date: 7/22/2016 Start Qty: 10.00

Required Date: 8/31/2016 Req'd Qty: 10.00

Reference:

Approvals: Process Plan: *SA* Date: *7/15/16*

QC: Date:

Tooling:

SPC (Y/N):

Date:

Date:

Run Start ***NR1***

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
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D3272	Rev B
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100	Document Control	0.00							
100	DOCUMENT CONTROL								

DC

Doc.Control -USB or Paperwork

Memo

Photocopy bluefile and type labels as per PPP D350-591-311 CHG001

DAS *AUG 29 2016*
6
9-89

snb
26/9/1

AUG 23 2016

DAS
24
9-89

110		0.00							
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110

Large Fab

Large Fab

Large Fab

Memo

1-Bevel end for welding FWD ONLY

2-Weld Support using Jig DT8719, weld Fwd End Plate as per QSI 004 & Dwg D3272

A/RAluminum Rod *134826*

3-Grind End Plate flush

10 *AUG 23 2016*

DAS
24
9-89

10 *16-07-25*

B#149016 10xLH

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause			FAULT CATEGORY																																																												
Environment ☐	Design ☐	Doc/Data ☐	Equip/Tooling ☐	Handling/Pre ☐	Material ☐	Internal Transport ☐	Tribal Knowledge ☐	LOA ☐	Substation ☐	Past Expiry Date ☐	Misidentified ☐	No Re-verification ☐	Operator ☐	Offset/Setup ☐	Supplier ☐	Training ☐	Use for Testing ☐	Poor Information ☐	Rushing ☐	Product Improvement ☐	Process Improvement ☐	Manufacturing Process ☐	Past Due ☐	Pressure/Forced ☐	Bending ☐	Centre Not Concentric ☐	Cracks ☐	Crimp/Kink/Ripple/Wave ☐	Cuffs ☐	Crushing ☐	Heat Treat ☐	Wave/Twist in Tube ☐	Marks/Chatter ☐	Temperature/Cure ☐	Set-up ☐	BOM/Route ☐	Broken/Damage/Defect ☐	Inspection Incomplete/Unqualified ☐	Contamination ☐	Countersink ☐	Cut Too Short ☐	Instructions Incomplete/Unclear ☐	Drill Holes ☐	Power Loss/Surge ☐	Folio/Program ☐	Grain ☐	Weld ☐	Wrong Stock Pulled ☐	Out of Sequence ☐	Off-set ☐	Mislabeled ☐	Fit/Function ☐	Misaligned/off center ☐	Positioned Wrong ☐	Outside Dimensions ☐	Over/Under tolerance ☐	Part Incorrect ☐	Part Lost/Missing ☐	Part Moved ☐	Drawing ☐	Finish ☐	Misread ☐	Turning Sequence ☐
																								OTHER : _____																																							

Work Order ID 149016

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Page 2

Item ID: D350-591-311

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Heli-Access-Step™ LH - High Gear, Long Step, Aerazur Float Compatible

Start Date: 7/22/2016 Start Qty: 10.00

10

Cust Item ID:

Required Date: 8/31/2016 Req'd Qty: 10.00

10

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC9- Inspect visual per QSI004- Fusion Welds	0.00							
120									
QC	Memo	0.00					10x	DAS 43 9-89	AUG 25 2016
Quality Control									
130	QC5- Inspect part completeness to step on W/O	0.00							
130									
QC	Memo	0.00					10x	DAS 43 9-89	AUG 25 20
Quality Control									
140	Chemical Conversion Coat per QSI005 4.1	0.00							
140									
HandFinish	Memo	0.33							
Hand Finishing									

(10) LH  2016/08/25
BEB

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____	
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

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Item ID: D350-591-311
 Revision ID:
 Item Name: Heli-Access-Step™ LH - High Gear, Long Step, Aerazur Float Compatible
 Start Date: 7/22/2016 Start Qty: 10.00
 Required Date: 8/31/2016 Req'd Qty: 10.00
 Reference:

Accept

N900040100

Setup Start *NS1*

Stop *NS2*

Cust Item ID:

Customer:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	QC7-Inspect Chemical Conversion Coat	0.00							
150									
QC	Memo	0.02							
Quality Control									
180		0.00							
180	Large Fab								
Large Fab	Memo	0.47							
Large Fab	1-Assemble Leg Assembly as per Dwg D3272.								
	2-Leave one rivet out until welding is complete.								
	3-Bevel Aft end for welding								
	4-Inspect for foreign object as per QSI 024								
	5-Weld Aft End Plate as per QSI 004 & Dwg D3272 A/RAluminum Rod 4130.137								
	6-Grind End Plate flush								
	7-Install last rivet as per Dwg.								

DAS
15
989

110611 / 1116108/29

DAS
43
9-89

10x

AUG 30 2016

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
0115 0 E 00A				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Work Order ID 149016

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Item ID: D350-591-311 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Heli-Access-Step™ LH - High Gear, Long Step, Aerazur Float Compatible
 Start Date: 7/22/2016 Start Qty: 10.00 *10* Cust Item ID:
 Required Date: 8/31/2016 Req'd Qty: 10.00 *10* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190 *190* QC Quality Control	QC10- Inspect visual per QSI004- ground welds Memo	0.00 0.00				10	AUG 30 2016		DAS 24 9-89
200 *200* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.03				10	AUG 30 2016		DAS 24 9-89
210 *210* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.12				(10) LH		2016/08/30	BEB

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
243 25 26-2				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Work Order ID 149016

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Item ID: D350-591-311 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Heli-Access-Step™ LH - High Gear, Long Step, Aerazur Float Compatible
 Start Date: 7/22/2016 Start Qty: 10.00 *10* Cust Item ID:
 Required Date: 8/31/2016 Req'd Qty: 10.00 *10* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
220 *220* Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum <i>m 135148</i> Memo START TIME: <i>1:55</i> OVEN TEMPERATURE: <i>320°</i> FINISH TIME: <i>2:25</i>	0.00 0.28				<i>10</i>	<i>18-08-30</i>		<i>DAS 34 9-89</i>
230 *230* HandFinish Hand Finishing	Wing Walk as per dwg QSI005 4.4 Batch <i>1134948</i> Memo	0.00 0.32				<i>(10) LH</i>		<i>2016/08/30</i> <i>WJ</i> <i>DAS 15 9-89</i> <i>BEB</i>	
240 *240* QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.02				<i>(10)</i>		<i>DAS 38 9-89</i> <i>AUG 31 2016</i>	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____																																																									
Description Work Order Deviation				Disposition																																																													
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Work Order ID 149016

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Item ID: D350-591-311

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Heli-Access-Step™ LH - High Gear, Long Step, Aerazur Float Compatible

Start Date: 7/22/2016 Start Qty: 10.00

10

Cust Item ID:

Required Date: 8/31/2016 Req'd Qty: 10.00

10

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
250	Pick Kit	0.00							
250									
Packaging	Memo	0.02							
Packaging									
260	QC4- 100% Inspect kits for completeness	0.00							
260									
QC	Memo	0.05							
Quality Control									
270	Packaging	0.00							
270									
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPPD350-591-311 Location : FG084								

10Y
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DAS
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9-89

AUG 3 0 2016

DQA:

Date: 09/22/2016



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date: SEP 14 2016

Work Order update only ☐

Work Order: 149016		DISPOSITION		AGAINST DEPARTMENT/PROCESS					
Part No. 0300591-311		Rework ☒		Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐		
NCR No. 116-6031		Scrap ☐		Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐		
		Use-as-is ☐		Thermoforming ☐	Finishing ☒	Rec/Store/Packaging ☐	Other ☐		
		Suspected Unapproved ☐		Large Fab ☐	Composite ☐	Supplier ☐			
Date: 16/08/31	Step #: 250	QTY Effective: 1				MRB (QSI042) Approval			
Description Work Order Deviation		Disposition				DAS 16 9-89 16/08/31 Completed By			
Found at Packaging that on one step that there was "Dart" in the powder coat at the step leg.		Scuff enter also 16-08-31 Re Power coat as per Q2005 in M 135418 Re wing walk per Q2005 in M 135317 2016/08/31 BEB				Lead hand / Supervisor Approval Verification DAS 16 9-89 16/08/31			
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☒	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☒				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER :							

Work Order ID 149016

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Item ID: D350-591-311**Accept*****N900040100*****Setup Start *NS1*****Revision ID:****Stop *NS2*****Item Name:** Heli-Access-Step™ LH - High Gear, Long Step, Aerazur Float Compatible**Start Date:** 7/22/2016 **Start Qty:** 10.00 ***10*****Cust Item ID:****Required Date:** 8/31/2016 **Req'd Qty:** 10.00 ***10*****Customer:****Reference:**

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Run Start *NR1***Stop *NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
280	QC21- Final Inspection - Work Order Release	0.00							
280							DAS	SEP 01 2016	
QC	Memo	0.17					21		
Quality Control							9-89		

DAS
21
9-89 **SEP 01 2016**

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		

Root Cause				FAULT CATEGORY			
Environment ☐	☐	No Re-verification ☐	☐	Pressure/Forced ☐	☐	Temperature/Cure ☐	☐
Design ☐	☐	Operator ☐	☐	Bending ☐	☐	Set-up ☐	☐
Doc/Data ☐	☐	Offset/Setup ☐	☐	Centre Not Concentric ☐	☐	BOM/Route ☐	☐
Equip/Tooling ☐	☐	Supplier ☐	☐	Cracks ☐	☐	Broken/Damage/Defect ☐	☐
Handling/Pre ☐	☐	Training ☐	☐	Crimp/Kink/Ripple/Wave ☐	☐	Inspection Incomplete/Unqualified ☐	☐
Material ☐	☐	Use for Testing ☐	☐	Cuffs ☐	☐	Contamination ☐	☐
Internal Transport ☐	☐	Poor Information ☐	☐	Crushing ☐	☐	Countersink ☐	☐
Tribal Knowledge ☐	☐	Rushing ☐	☐	Heat Treat ☐	☐	Cut Too Short ☐	☐
LOA ☐	☐	Product Improvement ☐	☐	Wave/Twist in Tube ☐	☐	Instructions Incomplete/Unclear ☐	☐
Substation ☐	☐	Process Improvement ☐	☐	Marks/Chatter ☐	☐	Drill Holes ☐	☐
Past Expiry Date ☐	☐	Manufacturing Process ☐	☐	OTHER : _____			
Misidentified ☐	☐	Past Due ☐	☐				

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149016

D350-591-311

Required Date: 8/31/2016

Required Qty: 10.00

Comments: IPP Rev:A04.03.22New issue KJ/RF
IPP Rev:B 07-06-09 Added D3272-1 JLM
IPP C returned to CHG001 for Eurocopter, ref NCR08-082 LL verified
by:EC IPP Rev:D fixe route seq in bom DD 10.04.28 verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3272-1		Manufactured	No			110	Each	0.0000	1	10		AUG 23 2016	DAS 24 9-89
D.3272-1													
Step									**	B149018 → 10			
D3067-1		Manufactured	No			110	Each	78.0000	1	10		AUG 23 2016	DAS 24 9-89
D.3067-1													
End Plate									**				
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				WA003				78					
				145081				24					
				<u>146024</u>				48		<u>10</u>			
				146702				6					
D3219-1		Manufactured	No			110	Each	48.0000	2	20		AUG 23 2016	DAS 24 9-89
D.3219-1													
Plate									**				
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				WA003				48					
				<u>146684</u>				48		<u>16</u>			
D3066-1		Manufactured	No			180	Each	84.0000	2	20			
D.3066-1													
Spacer									**	B146706 → 20x		AUG 30 2016	
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				WA003				84					
				144989				8					
				146706				76					

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Work Order ID: 149016

149016

Parent Item: D350-591-311

D350-591-311

Parent Item Name: Heli-Access-Step™ LH - High Gear, Long Step, Aerazur Float Compatible

Start Date: 7/22/2016

Required Date: 8/31/2016

Start Qty: 10.00

Required Qty: 10.00

MS20600-AD4W4

Purchased

No

180

Each

1,580.000

16

160

✓ ***MS20600-AD4W4***

Rivets

** **MB3990 → 160**

DAS
43
9-89

AUG 30 2016

Location

Loc Qty

Loc Code

CCK005

1270

M133990

770

M134955

500

LG

106

M133694

106

ST308

144

M133990

144

WA003

60

M133990

60

D3065-041

Manufactured

No

180

Each

16.0000

1

10

✓ ***D3065-041***

Step Leg Assembly

** **B149087 → 10x**

DAS
43
9-89

AUG 30 2016

Location

Loc Qty

Loc Code

WA002

16

145083

1

145654

15

D3067-1

Manufactured

No

180

Each

78.0000

1

10

✓ ***D3067-1***

End Plate

** **B149150 → 10x**

DAS
43
9-89

AUG 30 2016

Location

Loc Qty

Loc Code

WA003

78

145081

24

146024

48

146702

6

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Work Order ID: 149016

149016

Parent Item: D350-591-311

D350-591-311

Parent Item Name: Heli-Access-Step™ LH - High Gear, Long Step, Aerazur Float Compatible

Start Date: 7/22/2016

Required Date: 8/31/2016

Start Qty: 10.00

Required Qty: 10.00

AN3-35A Purchased No 250 Each 121.0000 2 20

AN3-35A

Bolt

**

pc DAS 28 9-89

DAS 27 9-89

Location

Loc Qty

Loc Code

FG 10
122800 10
ST348 111
m134167 50
m134497 1
m134943 60

20

D3235-1 Manufactured No 250 Each 94.0000 2 20

D3235-1

Mounting Lug

**

pc DAS 28 9-89

DAS 27 9-89

Location

Loc Qty

Loc Code

ST521 94
146290 94

20

D3278-041 Manufactured No 250 Each 0.0000 1 10

D3278-041

Support Assembly

**

20 x B146685 pc DAS 28 9-89
20 x B145581 pc

NAS1149D0463J

9-89

Purchased No 250 Each 2,287.000 16

NAS1149D0463.J

WASHER

**

160 x M135390 pc DAS 28 9-89

DAS 27 9-89

Location

Loc Qty

Loc Code

GA 86
M132035 21
M134508 65
ST260a 2000
M134943 1000
M135056 1000
ST263 201
M134852 201

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Work Order ID: 149016

149016

Parent Item: D350-591-311

D350-591-311

Parent Item Name: Heli-Access-Step™ LH - High Gear, Long Step, Aerazur Float Compatible

Start Date: 7/22/2016

Required Date: 8/31/2016

Start Qty: 10.00

Required Qty: 10.00

NAS1149D0563J

Purchased

No

250

Each

1,230.000

4

40

NAS1149D0563J

Washer

**

pc DAS
28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

GA

207

m125807

2

m133769

205

ST263

924

m134497

124

m135058

800

ST269

99

m128257

99

416

AN5-36A

Purchased

No

250

Each

39.0000

2

20

AN5-36A

Bolt

**

pc DAS
28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST336

39

M130466

15

M134861

24

D2618

Manufactured

No

250

Each

164.0000

2

20

D2618

Bushing

**

pc DAS
28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

ST008A

5

146622

5

ST012a

159

147525

159

20

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Work Order ID: 149016

149016

Parent Item: D350-591-311

D350-591-311

Parent Item Name: Heli-Access-Step™ LH - High Gear, Long Step, Aerazur Float Compatible

Start Date: 7/22/2016

Required Date: 8/31/2016

Start Qty: 10.00

Required Qty: 10.00

D2230-3

Manufactured No

250

Each

186.0000

4

40

D2230-3

Mounting Lug

**

DAS
28
9-89
pc

Location

Loc Qty

Loc Code

FG

8

109344

4

89045

4

ST521

2

144487

2

ST525A

176

146287

176

D2856-400-720

Manufactured No

250

Each

36.0000

2

D2856-400-720

Abrasion Strip 4" X 7.20"

**

40
20
XB 149045 pc
DAS
28
9-89

Location

Loc Qty

Loc Code

FG

26

134509

4

137049

2

141946

7

146220

13

ST418

10

137049

0

146220

10

DAS
27
9-89

AUG 31 2016

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Work Order ID: 149016

149016

Parent Item: D350-591-311

D350-591-311

Parent Item Name: Heli-Access-Step™ LH - High Gear, Long Step, Aerazur Float Compatible

Start Date: 7/22/2016

Required Date: 8/31/2016

Start Qty: 10.00

Required Qty: 10.00

MS21042L3

Purchased No

250 Each

2,480.000 2

MS21042L3

Nut

**

20

XM135135 p28 9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

CCK007

600

m135056

600

FP001

14

m133790

14

GA

127

m134360

127

OVER007

1200

m135135

1200

ST303

539

m134039

12

m134943

527

AN4-13A

Purchased No

250 Each

297.0000 8

AN4-13A

Bolt

**

80

XM135390 p28 9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

FG

20

122808

20

GA

59

m134167

35

m134634

24

over003

100

m134943

100

ST343

118

m134852

118

AUG 31 2016

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Work Order ID: 149016

149016

Parent Item: D350-591-311

D350-591-311

Parent Item Name: Heli-Access-Step™ LH - High Gear, Long Step, Aerazur Float Compatible

Start Date: 7/22/2016

Required Date: 8/31/2016

Start Qty: 10.00

Required Qty: 10.00

MS21042L5

Purchased

No

250

Each

398.0000

2

20

MS21042I 5

Nut

**

PC

DAS
28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

GA	81
m127813	81
ST303	317
m134055	6
m134509	65
m134955	146
<u>m135058</u>	100

MS21042L4

Purchased

No

250

Each

2,043.000

8

80

MS21042I 4

Locknut

**

80
X M135297 PC

DAS
28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

FP001	51
m133363	51
GA	156
m133769	156
OVER007	1000
m135127	1000
ST3003	269
m134955	269
ST303	550
m127376	12
m134861	38
m135058	500
ST305	17
m130922	17

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Work Order ID: 149016

149016

Parent Item: D350-591-311

D350-591-311

Parent Item Name: Heli-Access-Step™ LH - High Gear, Long Step, Aerazur Float Compatible

Start Date: 7/22/2016

Required Date: 8/31/2016

Start Qty: 10.00

Required Qty: 10.00

NAS1149D0363J

Purchased

No

250

Each

1,466.000

4

40

NAS1149D0363.J

Washer

PC

DAS
28
9-89

DAS
27
9-89

Location

Loc Qty

Loc Code

GA	418	
m134055	418	
ST263	1048	
m134676	48	
m134955	1000	

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DART

DESIGN <i>GP</i>	DRAWN BY <i>JB</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>LE</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3272	REV. B SHEET 1 OF 3
DATE 07.05.18		TITLE STEP ASSEMBLY, HI LONG	SCALE NTS
A	04.03.01	NEW ISSUE	
B	07.05.18	D3272-1 WAS D2622-120	

RELEASED*07 06 04*

QTY -041	QTY -042	PART NUMBER	DESCRIPTION
X		D3272-041	STEP ASSEMBLY, HIGH LONG (LH)
	X	D3272-042	STEP ASSEMBLY, HIGH LONG (RH)
1	1	D3065-041	LEG ASSEMBLY
2	2	D3066-1	SPACER
2	2	D3067-1	END PLATE
2	2	D3219-1	SUPPORT
1	1	D3272-1	STEP
16	16	MS20600AD4W4	RIVET

GENERAL NOTES:

- 1) D3272-041 SHOWN. FOR D3272-042, INSTALL D3219-1 SUPPORT OPPOSITE SIDE
- 2) WELD PER DART QSI 004
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005.4.1
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 5) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.
- 6) BREAK ALL SHARP EDGES 0.005 TO 0.010 MAX.

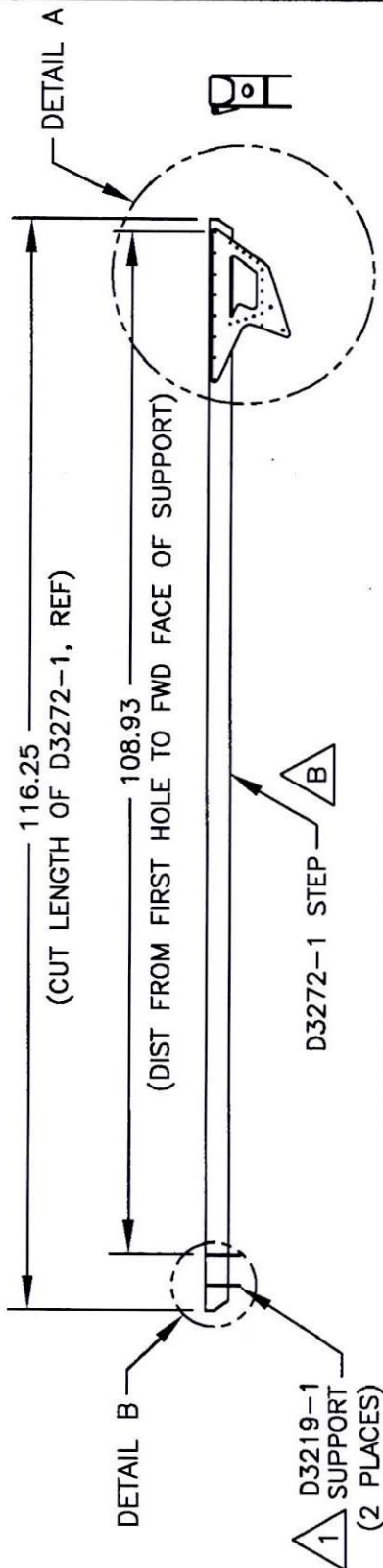
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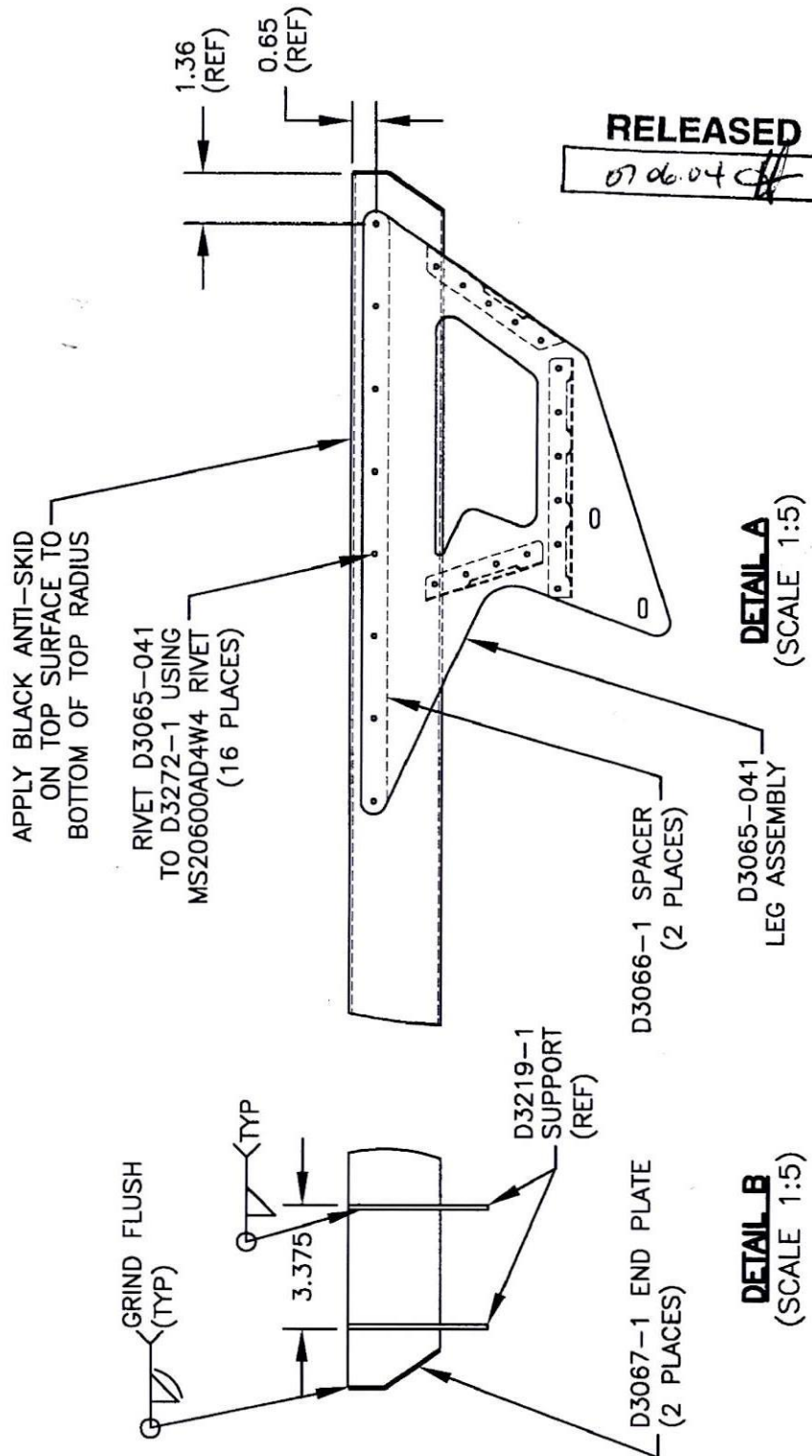
7/15/16
SW 149D16

DART

DESIGN <i>qp</i>	DRAWN BY <i>AB</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>LE</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3272	REV. B SHEET 2 OF 3
DATE 07.05.18	TITLE STEP ASSEMBLY, HI LONG		SCALE 1:20



D3272-041 STEP ASSEMBLY (LH, SHOWN)
D3272-042 STEP ASSEMBLY (RH, OPPOSITE)

**RELEASED**

07.06.04

DETAIL A
(SCALE 1:5)**DETAIL B**
(SCALE 1:5)

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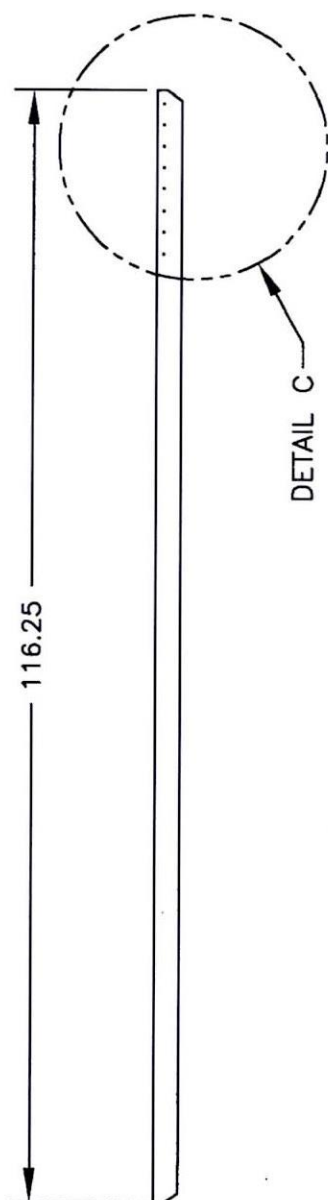
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DESIGN <i>qp</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>LE</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3272	REV. B SHEET 3 OF 3
DATE 07.05.18		TITLE STEP ASSEMBLY, HI LONG	SCALE 1:20

RELEASED

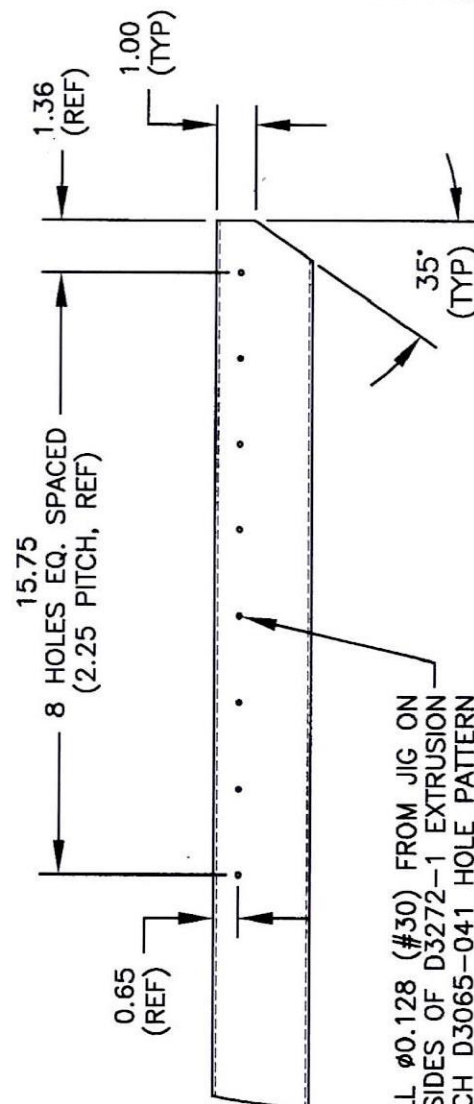
07 06 04 *[Signature]*



DETAIL C

B D3272-1 STEP

(MAKE FROM D2622-120 STEP EXTRUSION)



DRILL $\phi 0.128$ (#30) FROM JIG ON BOTH SIDES OF D3272-1 EXTRUSION TO MATCH D3065-041 HOLE PATTERN

DETAIL C
(SCALE 1:5)

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